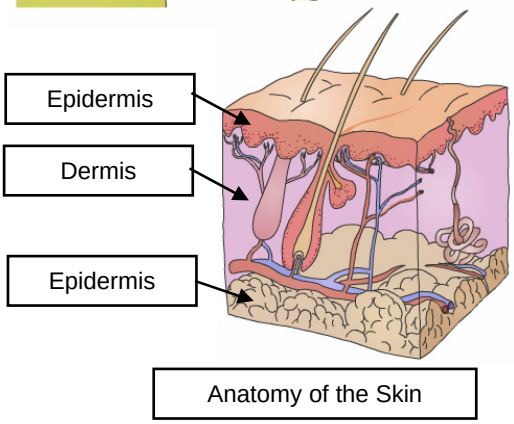
Keeping Your Skin Healthy

Introduction

The skin is your body's special suit of armor and the largest organ you have. In order to take care of it, you need to get to know your skin.

This reference summary will help you better understand your skin and how to keep it healthy.

The Skin



Anatomy of the Skin

The skin is made up of three layers: the epidermis, dermis, and hypodermis. The epidermis is the outermost layer. It contains a substance called keratin that helps waterproof the skin.

The dermis is the middle layer of the skin. It contains a substance called collagen for strength, blood vessels for nutrition, and nerve fibers for sensation. Collagen is a fibrous substance found in cartilage and other connective tissues. Cartilage is the tough, flexible tissue that lines your joints and gives structure to your nose, ears and other parts of your body. The dermis also contains sweat and oil glands for temperature regulation and protection.

The hypodermis is the deepest layer of skin. The hypodermis contains fat for cushioning, insulation and energy storage.

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Your skin is essential to your health. It regulates your temperature. It protects you from infection. It helps you sense the world around you. It produces Vitamin D with the help of sunlight. Vitamin D helps the body use calcium and phosphorus to make strong bones and teeth. It also has other roles in the body. It helps the immune system fight infections and diseases.

Heat

Regulating your body temperature is a key function of the skin. Normal skin temperature is 92 degrees. Your core body temperature is around 98.6 degrees. The skin acts like an automatic air conditioning system to maintain your body's core temperature. The body's response to excess heat is to dilate, or expand, blood vessels. This releases heat by:

- Conduction
- Radiation
- Evaporation

Conduction happens when heat from a warmer object is passed to another, cooler object. If you sit on a metal chair, the heat from your warm skin will pass to the cold metal chair and make you feel cooler. Radiation is heat loss by radiating heat waves. If your body is warmer than the room you are sitting in, your skin will release heat waves and make you feel cooler. Evaporation is heat loss through sweat evaporating, or drying, from the skin. When you get hot you sweat. When the sweat evaporates, it leaves your skin feeling cooler.

Sweating cools the body. High humidity affects the skin's ability to sweat. Failure to cool the body may cause heat exhaustion. Heat exhaustion can develop into a life-threatening condition known as "heat stroke." Dressing the right way can help prevent heat exhaustion and heat stroke. Wear light, loose layers of clothing. They help your body to cool more easily.

Cold

The body responds to cold in several ways. One way is that the blood vessels constrict, or narrow, to redirect heat to where it is needed most, such as the internal organs. "Goose bumps" are another way in which the body responds to cold. Tiny muscles attached to hair follicles cause hair to stand out, causing "goose bumps." Goose bumps may help to save heat.

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Cold temperatures can also cause the body to shiver. Shivering generates heat from increased muscular activity. Exposing the skin to extreme cold conditions without protection may cause frostbite. Frostbite happens when your skin freezes, damaging the skin and tissue beneath it. Your nose, toes, feet, ears, and fingers are more prone to frostbite. Frostbite can happen even if you are only exposed to the cold for a short time. This is because when your blood vessels constrict, it reduces the flow of blood and warmth to the skin. To prevent frostbite and other complications from being in the cold, you should always bundle up.

When Skin is Too Wet

Moisturizers can help dry skin. However, too much moisture can damage your "suit of armor." Too much moisture may be caused by water, perspiration, or other liquids. If your skin is too moist, it may appear:

- Prune-like
- Pale and spongy
- Fragile and soft

Remember the last time you stayed in the bathtub too long? Your skin may have become waterlogged or "macerated." This can lead to damage to or loss of the skin's outermost layers. Normally, glands located in your skin produce an oily substance to help protect your skin from too much moisture. When this is soaked away, the skin can develop problems.

When sweat gets trapped and cannot evaporate easily, you may also develop skin that is waterlogged. Sweat may get trapped in skin folds or in between toes, for example. These areas may become raw, irritated and even infected when the damaged, prune-like skin rubs off.

When Skin is Too Dry

Many people are prone to having dry skin. Cold or dry weather increases the chances of having dry skin. Loss of humidity in the air, whether the air is cold or hot, can also result in dry skin.

Dry skin may:

- Feel tight and itchy
- Crack and flake
- Be easily damaged

Like wet skin, dry skin is fragile. Cuts, scrapes and skin tears may result from dry skin. These can lead to serious infections if they are not taken care of properly.

Sun Damage

Sun exposure does not just result in painful sunburn. It can lead to faster loss of skin function over your lifetime. Sun exposure has also been linked to skin cancer.

To prevent sun damage, you should avoid direct sunlight during the hours of 10:00 am to 3:00 pm when the sun is the hottest. You should also wear a hat and protective clothing to help shield you from the sun's damaging rays. Also, you should always use sunscreen with a Sun Protection Factor (SPF) of 30 or higher when spending time outside. Sunscreen should be reapplied often. Don't count on a cloudy day or darker skin tone to protect you from sun damage.

General Care & When to Seek Help

In order for your skin to provide the best function and protection, you need to protect it from damage. You also need good nutrition and plenty of water.

Taking care of your skin doesn't need to be difficult or cost a lot of money. A gentle, pH-balanced cleanser should be used to clean your skin. pH is a measure of the acidity or alkalinity of a substance. On a scale of 1 being the most acidic to 14 being the most alkaline, a pH of 7 is considered neutral. A gentle, pH balanced cleanser should have a pH of about 4.5-5.0 Also, moisturizers like lotion or oil make your skin softer. These should be applied within 3 minutes of bathing and when skin looks or feels dry.

As you age, your skin will naturally change. Your skin will become more fragile and dry. The layers will also become thinner. While you can't stop aging, there are steps you can take now to keep your skin healthy for the future. Despite good care, skin may develop infections, growths or other changes that require evaluation by a qualified health care provider. Waiting to seek medical attention can result in pain and serious damage.

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See your health care provider if you have a rash that doesn't get better quickly or if you have open sores that don't heal in two weeks. Redness, heat, pain and swelling at the site of an open sore, crack, or scrape is also a reason to contact your health care provider. Moles or other marks that change in color, size, shape or that become painful also need to be checked.

Summary

The skin is your body's special suit of armor and the largest organ you have. In order to take care of it, you need to get to know your skin.

Heat, cold, moisture, dryness, and sunlight all can affect your skin. In order for your skin to provide the best function and protection, you need to protect it from damage.

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